

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05100011-2014**

Application Received: **September 13, 2013**

Plant Identification Number: **051-00011**

Permittee: **Rain CII Carbon LLC**

Mailing Address: **8245 Energy Road, Moundsville, WV 26041**

Revised: N/A

Physical Location: Moundsville, Marshall County, West Virginia
UTM Coordinates: 515.30 km Easting • 4409.20 km Northing • Zone 17
Directions: Drive south on Rt. 2 from Moundsville. The plant is about 10 miles south and is on the right (Ohio River side of route 2), between the AEP Kammer and Mitchell power plants.

Facility Description

This onshore calcining plant calcines raw (green) coke. Raw coke can be petroleum coke of various forms, which is a solid byproduct of the refining of petroleum, or any other carbonaceous material that can be calcined. The plant is mainly a solids handling facility with the following Facility SIC Codes:

2895 - Chemicals and Allied Products - Carbon Black

2999 - Petroleum Refining and Related Industries - Petroleum and Coal Products

3229 - Stone, Clay, Glass, and Concrete Products - Pressed and Blown Glass, NEC

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2012 Actual Emissions
Carbon Monoxide (CO)	2176	473.6
Nitrogen Oxides (NO _x)	1046	339.7
Particulate Matter (PM _{2.5})	551	189.2

Regulated Pollutants	Potential Emissions	2012 Actual Emissions
Particulate Matter (PM ₁₀)	783	309.3
Total Particulate Matter (TSP)	1176	471.8
Sulfur Dioxide (SO ₂)	21082	5461
Volatile Organic Compounds (VOC)	8.6	1

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2012 Actual Emissions
Nickel Compounds	42	12.1

Some of the above HAPs may be counted as PM or VOCs.

This facility has the potential to emit equal to or greater than 100,000 tons per year of carbon dioxide equivalent (CO₂e) and 100 tons per year of greenhouse gases (GHGs) on a mass basis.

Title V Program Applicability Basis

This facility has the potential to emit over 100 tons per year of Carbon Monoxide, Nitrogen Oxides, PM₁₀, and Sulfur Dioxide; and over 10 tons per year of Nickel compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and 25 tons per year of aggregate HAPs, and over 100,000 tons per year of carbon dioxide equivalent and 100 tons per year of greenhouse gases on a mass basis, Rain CII Carbon LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR7	Particulate Matter limits
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction permits
	45CSR16	Performance Standards for New Stationary Sources
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	40CFR30	Operating permit requirement.
	40CFR60 Subpart IIII	Stationary Compression Ignition Engines NSPS
	40CFR63 Subpart ZZZZ	Reciprocating Internal Combustion Engine MACT
	40CFR Part 61	Asbestos inspection and removal
	40CFR Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to request any pertinent information such as annual emission inventory reporting is provided in WV Code § 22-5-4(a)(14). The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0563 for construction of the coke fines agglomeration plant	July 16, 1980	
R13-0588 for construction of CCS-10, 11, 12, and 13	Nov. 18, 1980	
R13-0662 for construction of storage silo GCS-6	June 25, 1982	
R13-2095R	May 27, 1997	
R13-2612A	July 31, 2008	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a second renewal of the Title V Permit. The following changes have occurred since the most recent Title V permit was issued:

Condition 3.1.10. was added because the unloading equipment, conveying and stockpile storage pads are subject to the 45CSR§7-3.1. opacity limitation. They are not subject to the weight emission limits of 45CSR§7-4.1 which apply to stacks from manufacturing equipment. Monitoring Requirement 3.2.2. (visual emissions checks) was added for compliance demonstration with 45CSR§§7-3.1.

Condition 3.3.1.d. was added to the boilerplate requiring submission of test reports.

The streamlining language in Condition 4.1.5.a. was changed to reference Condition 4.1.6.

Condition 4.1.7. citation was updated to include R13-2612, Condition 4.1.10.c.

Section 6.0. was changed to include all storage silos and storage bins.

Section 8.0 has been renumbered to be consistent with the rest of the permit. Old condition 8.1.7. became conditions 8.1.1. through 8.1.3. Testing requirements from condition 8.1.7. were moved to conditions 8.3.1. and 8.3.2. Old conditions 8.1.1. through 8.1.6. then became conditions 8.1.4. through 8.1.9.

Old Condition 3.1.10. was deleted since it contained placeholder language for 40 CFR part 63, subpart ZZZZ. New Section 9.0 now has the requirements for the emergency generators. EN-02 through EN-05 are subject to 40 CFR part 63, subpart ZZZZ. EN-01 was removed and replaced with EN-06. EN-06 is subject to 40 CFR part 60, subpart IIII and 40 CFR part 63, subpart ZZZZ

40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Generators EN-02 through EN-05 were manufactured from 1977 to 1993 and have horse power ratings between 36 and 130 hp. They are classified in Subpart ZZZZ as existing, emergency compression ignition (CI) engines, less than 500 HP, at a major source of HAPs. The main requirements of the rule applicable to these engines are oil changes, inspections of the engines, and minimizing the engines' startup time. The engines must be operated according to manufacturer's instructions and the permittee must monitor operating hours with a non-resettable hour meter. Recordkeeping and reporting are required by the rule and are incorporated into the Title V Permit.

Generator EN-06 is rated at 66 hp and has a manufacture date of April 9, 2013. In order to comply with the rule the engine must meet the standards of 40 CFR 60 Subpart IIII as specified in 40 CFR §63.6590(c)(7).

40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary CI Internal Combustion Engines. Generator EN-06 is classified as a new, emergency CI engine with a displacement of less than 30 liters per cylinder. The rule refers to 40 CFR §89.112, Table 1, which requires that the new engine meet the following standards (engine maximum power between 37 and 75 kw, Tier 3):

NO _x +NMHC (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)
4.7	5	0.4

The rule also requires: opacity standards from 40 CFR §89.113, diesel fuel standards, and operating and maintaining the engine according to manufacturer's instructions. The rule requires monitoring operating hours with a non-resettable hour meter, and a monitor for the backpressure of the diesel particulate filter. Recordkeeping and reporting are required by the rule and are incorporated into the Title V Permit.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR2 does not apply because this facility does not have a fuel burning unit.

45CSR5 does not apply because this facility is not a coal prep plant.

40 CFR Part 60, Subpart Dc does not apply because this facility does not have steam generating units.

40 CFR 64 - Compliance Assurance Monitoring. This is the second permit renewal for this facility. CAM was found not to be applicable to this facility at the time of the first renewal. Therefore, a CAM determination is not required.

GHG Clean Air Act requirements - This is a second renewal Title V permit and there have been no modifications that would have triggered a PSD permit.

Request for Variances or Alternatives

In the event of a scheduled outage which is planned to last greater than 3 months; maintenance, inspection and record keeping requirements will not be considered applicable during the shutdown period. An inspection of the effected equipment will be required prior to returning the effected equipment to service. Rain CII is required to provide notice to the State with 30 days of beginning such a shutdown.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: May 6, 2014
Ending Date: June 5, 2014

Point of Contact

All written comments should be addressed to the following individual and office:

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
Bobbie.Scroggie@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

No comments received.